

1/5

SEQUENCE LISTING

<110> TOYOBO RESEARCH CENTER CO., LTD.

<120> Hyaluronic Acid Synthase

<130> P04-78

<150> JP2003-204896

<151> 2003-07-31

<150> JP2004-89135

<151> 2004-03-25

<160> 6

<170> PatentIn version 3.1

<210> 1

<211> 1707

<212> DNA

<213> Chlorella virus

<400> 1

atgggtaaaa atataatcat aatgggtttcg tggtagacca tcataacttc aaatctaadc	60
gcgggttgag gagcctctct aatcttggct ccagcaatta ctgggtatat tctacattgg	120
aatattgctc tctcgacaat ctggggagta tcagcttatg gtattttcgt ttttggtttt	180
ttccttgcac aagttttatt ttcagaactg aacaggaaac gtcttcgcaa gtggatttct	240
ctcagaccta agggttggaa tgatgtccgt ttggctgtga tcattgctgg ataccgcgaa	300
gatccctata tgttccaaaa gtgtctcgag tcagtgcgtg actctgacta cggtaacgtt	360
gctcgtctca tttgtgttat tgacggcgat gacgacgtg atatgaagat gtccgatgtt	420
tacaagacga tctacaacga taatatcaag aagccccagt ttgtcttgtg tgagtcagac	480
gacaaggaag gtgaacgcac cgactctgat ttctctcgcg acatttgtgt tctccagcct	540

caccgtggca agagggagtg tctctatact ggtttccaac ttgcaaagat ggaccccagt 600
 gtcaacgccg tcgttttgat tgacagcgat actgttctcg agaaggatgc tattctggaa 660
 gttgtatacc cacttgcagc cgatcctgag atccaagccg tcgcaggtga gtgtaagatt 720
 tggaacacag acactctttt gagtcttctc gtcgcttggc ggtactattc tgcgttttgt 780
 gtggagagga gtgcccagtc ttttttcagg actgttcagt gcgttggggg cccgctgggt 840
 gcctacaaga ttgatatcat taaggagatt aaggaccctt ggatttccca gcgctttctt 900
 ggtcagaagt gtacttacgg tgacgaccgc cggctaacca acgagatctt gatgcgtggt 960
 aaaaaggttg tgttcactcc atttgctggt ggttggtctg acagtccgac caatgtgttt 1020
 cgatacatcg ttcagcagac ccgctggagt aagtcgtggt gccgcgaaat ttggtacacc 1080
 ctcttcgccg cgtggaagca cggtttgtct ggaatttggc tggcctttga atgtttgtat 1140
 caaattacat acttcttctt cgtgatttac ctcttttctc gcctagccgt tgaggccgac 1200
 cctcgtcccc agacagccac agtgattgtg agcaccacgg ttgcattgat taagtgtggg 1260
 tatttttcat tccgagccaa ggatattcgg gctttttact ttgtgcttta tacatttggt 1320
 tactttttct gtatgattcc ggccagggtt actgcaatga tgacgctttg ggacattggc 1380
 tggggtactc gcggtggaaa cgagaagcct tccgttgga cccgggtcgc tctgtgggca 1440
 aagcaatata tcattgcata tatgtggtgg gccgcggtt ttggcgctgg agtttacagc 1500
 atcgtccata actggatggt cgattggaat tctctttctt atcgttttgc tttggttggt 1560
 atttgttctt acattgtttt tattactatt gtgctggtga tttatttcac cggcaaaatt 1620
 acgacttgga atttcacgaa gcttcagaag gagctaactg aggatcgtgt tctgtacgat 1680
 gcatctacca atgctcagtc tgtgtga 1707

<211> 1707

<212> DNA

<213> Chlorella virus

<400> 2

atgggtaaaa atataatcat aatggtttcg tggtaacca tcataacttc aaatctaate	60
gcggttggag gagcctctct aatcttggct ccagcaatta ctggatatat tctacattgg	120
aatattgctc tctcgacaat ctggggagta tcagcttatg gtattttcgt ttttggtttt	180
ttccttgcac aagttttatt ttcagaactg aacaggaaac gtcttcgcaa atggatttct	240
ctcagacctc agggttggaa tgatgtccgt ttggctgtga tcattgctgg ataccgcgaa	300
gatccctata tgttccaaaa gtgtctcgag tcagtgcgtg actctgacta cggtaacgtt	360
gtcgtctca tttgtgttat tgacggcgat gacgacgtg atatgaagat gtccgatgtt	420
tacaagacga tctacaacga taatatcaag aagcccgagt ttgtcttgtg tgagtcagac	480
gacaaggaag gtgaacgcat cgactctgat ttctctcgcg acatttgtgt tctccagcct	540
caccgtggca agaggagtg tctctatact ggtttccaac ttgcaaagat ggaccccagt	600
gtcaacgccg tcgttttgat tgacagcgat actgttctcg agaaggatgc tattctggaa	660
gttgataacc cacttgcatt cgatcctgag atccaagccg tcgcaggtga gtgtaagatt	720
tggaacacag acactctttt gagtcttctc gtcgcttggc ggtactattc tgcgttttgt	780
gtggagagga gtgcccagtc ttttttcagg actgttcagt gcgttggggg cccgctgggt	840
gcctacaaga ttgatcat taaggagatt aaggaccctt ggatttccca gcgctttctt	900
ggtcagaagt gtacttacgg tgacgaccgc cggctaacca acgagatctt gatgcgtggt	960
aaaaagggtg tgttcactcc atttgctggt ggttggtctg acagtccgac caatgtgttt	1020
cgatacatcg ttcagcagac ccgctggagt aagtcgtggt gccgcgaaat ttggtacacc	1080
ctctttgccg cgtggaagca cggtttgtct ggaatttggc tggcctttga atgtttgtat	1140

caaattacat acttcttcct cgtgatttac ctcttttctc gcctagccgt tgaagccgac 1200
 cctcgctccc agacagccac agtgattgtg agcaccacgg ttgcattgat taagtgtggg 1260
 tatttttcat tccgagccaa ggatattcgg gctttttact ttgtgcttta tacatttggt 1320
 tactttttct gtatgattcc ggccagggtt actgcaatga tgacgctttg ggacattggc 1380
 tgggggtactc gcggtggaaa cgagaagcct tccgttggca cccgggtcgc tctgtgggca 1440
 aagcaatata tcattgcata tatgtggtgg gccgcggttg ttggcgctgg agtttacagc 1500
 atcgccata actggatggt cgattggaat tctctttctt atcgttttgc tttggttggt 1560
 attgtttctt acattgtttt tattactatt gtgctggtga tttatttcac cggcaaaatt 1620
 acgacttgga atttcacgaa gcttcagaag gagctaatac aggatcgtgt tctgtacgat 1680
 gcatctacca atgctcagtc tgtgtga 1707

<210> 3
 <211> 40
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> primer

<400> 3
 gccgccgcat atgggtaaaa atataatcat aatggtttcg 40

<210> 4
 <211> 36
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> primer

<400> 4

cttgcaagtct agatcacaca gactgagcat tggtag

36

<210> 5

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 5

gtgtggaatt taaagcggat aacaatttca cacagg

36

<210> 6

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 6

gggcgaattg gagctccacc gcgg

24